

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Rejection of Claims 1-17 Under 35 USC §112, 2nd Paragraph

This rejection has been addressed by:

- a. amending claim 1 to specify that the random number is placed into the clear file before it is downloaded to the terminal, the random number having been generated and displayed on the display (thereby answering the question asked in item 3 on page 2 of the Official Action of “*where the random number is being downloaded from, and how it got there*”);
- b. amending claim 2 to positively recite digital signing of the file, and amending claim 4 to clarify that the private key of claim 4 is the same as the private key of claim 2;
- c. amending claim 8 to depend from claim 7, which positively recites the “smartcard” and digital signing of the clear file; and
- d. amending claim 10 to specify display of the random number and placement in the clear file before downloading to the terminal, as also recited in amended claim 1.

It is respectfully noted that the steps of displaying the random number and placing it in the clear file are disclosed, for example, in lines 16-20 on page 5 and lines 4-7 on page 9 of the original specification. The inclusion of the random number in the clear file protects the terminal clear file authentication arrangement from replay attacks resulting from copying of the signed clear file, as explained in the paragraph bridging pages 2 and 3 of the original specification.

2. Rejection of Claims 1 and 2 Under 35 USC §101

This rejection has been addressed by amending claim 1 to positively recite execution of the clear instruction.

3. Rejection of Claims 1-5, 7-13, 15, and 16 Under 35 USC §102(e) in view of U.S. Patent No. 6,404,862 (Holt)

This rejection is respectfully traversed on the grounds that the Holt patent neither discloses nor suggests a terminal reset system (*i.e.*, a “system for restoring a terminal to a default condition”) in which the clear file is digitally signed *and* includes a random number generated and displayed by the terminal each time a reset operation is to be carried out, the inclusion of the random number preventing replay attacks,” as claimed.

In contrast, the Holt patent discloses an authentication device that performs a challenge-and-response procedure between a smart card and a remote service. The challenge response procedure does not involve signing a file, much less a clear file to be downloaded to a terminal or inclusion of a random number in the clear file, the random number being displayed on a display of the terminal. In fact, as explained in the abstract of the Holt patent, “*The device is dedicated solely to said authentication procedure and has no display.*”

Basically, the Holt patent has nothing to do with the claimed invention, which is specifically directed to a system and method for preventing malicious downloading of terminal reset or “clear” files, by providing not only for authentication of the clear files, but also protection from replay attacks in which the digitally signed clear file is itself copied. Authenticating a person’s identity to a remote device over a telephone line is not the same as authenticating a clear file to be downloaded to a terminal after inclusion of a random number displayed on the terminal, followed by signing of the clear file including the random number.

According to the Examiner, restoring a terminal to a default condition corresponds to logging-in a user. This interpretation makes no sense, and certainly would not occur to one of ordinary skill in the art. Logging in a user does not require downloading of a file, much less signing of the file. Furthermore, the random number mentioned in col. 2 lines 57-59 is not generated by any terminal for inclusion in a signed clear file to be downloaded to the terminal,

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but rather is generated by the remote service at the opposite end of the telephone line and transmitted in the form of a series of tones over the telephone line.

In addition, it is respectfully noted that the Holt patent does not provide for downloading of a signer certificate in the manner recited in claim 4 and 13, since the only data transmitted over the telephone line is the random number and the encrypted random number, or the inclusion of a clear string in the file type field of the signer certificate as recited in claims 9 and 16. The Holt patent could not possibly suggest such a clear string of a file type field since Holt does not concern any sort of "clearing" or a "file type field."

Of course, the use of random numbers as part of challenge-response authentication protocols is well-known. However, the Holt patent is not even remotely suggestive of, and certainly does not *anticipate*, using random numbers in connection with downloading of clear files to a secure terminal. As a result, it is respectfully submitted that the rejection of claims 1 and 2 under 35 USC §102(e) is improper and withdrawal of the rejection is respectfully requested.

4. Rejection of Claims 6, 14, and 17 Under 35 USC §102(e) in view of U.S. Patent Nos. 6,404,862 (Holt) and 6,711,263 (Nordenstam)

This rejection is respectfully traversed on the grounds that the Nordenstam patent, like the Holt patent, neither discloses nor suggests a system for restoring a terminal to a default condition in which the clear file is digitally signed *and* includes a random number generated and displayed by the terminal each time a restoring operation is to be carried out, as recited in claim 1, much less use of a stored sponsor certificate to authenticate a signer certificate downloaded with the clear file, as recited in claim 14, or the deletion of certificates upon restoration of the terminal to a default condition, as recited in claim 17.

The Nordenstam patent is instead directed to private key distribution system in which the private keys being distributed are authenticated by corresponding public key certificates.

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Nordenstam patent does not disclose any sort of clear file, or display of a random number and inclusion in the clear file, and further does not disclose, or suggest any need for, deletion of certificates upon authentication of the clear file, authentication of the signer's certificate, and execution of the clear instruction. As a result, it is respectfully submitted that the Nordenstam could not have suggested modification of the system of Holt to include these features.


It is noted that the Examiner cites col. 9, lines 12-26 of the Nordenstam patent as teaching deletion of certificates. Col. 9, lines 12-26 of the Nordenstam patent contain no such teaching. Instead, the "deletion" referred to in this passage is deletion of received key information. The certificates necessary to authenticate the key information (and the delete request) are not deleted, and there is no suggestion to do so, much less a suggestion to do so after executing a "clear" instruction, as claimed.

Accordingly, it is respectfully submitted that the rejection of claims 6, 14, and 17 under 35 USC §103(a) is improper and withdrawal of the rejection is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC


By: BENJAMIN E. URCIA
Registration No. 33,805

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BACON & THOMAS, PLLC
625 Slaters Lane, 4th Floor
Alexandria, Virginia 22314
Telephone: (703) 683-0500